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[OPTS 140005; TSH-FRL-2052-7]

Maxima Corp.; Transfer of Data to Contractor

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA has contracted with Maxima Corporation of Bethesda, Maryland to provide typing and editing services to the Office of Toxic Substances. Some of the material which Maxima will have access to may contain confidential business information.

DATE: Access to confidential business information will occur no sooner than March 1, 1982.

FOR FURTHER INFORMATION CONTACT:

John G. Davidson, Management Support Division (TS-793), Office of Toxic Substances, Environmental Protection Agency, Rm. E-521, 401 M St. SW., Washington, D.C. 20460, (202-382-3783).

SUPPLEMENTARY INFORMATION: EPA has contracted with Maxima Corporation (Contract Number 68–01–6466) to provide typing and editing services to the Office of Toxic Substances (OTS). OTS needs the assistance of Maxima because it does not have sufficient staffing for the amount of work it must perform within certain time constraints.

Some of the drafts which Maxima will receive to type and edit may contain information claimed confidential, including Toxic Substances Control Act (TSCA) confidential business information. Pursuant to 40 CFR 2.306(j), it has been determined that such disclosure of confidential business information to Maxima is necessary for the satisfactory performance of this contract.

At no time will Maxima be permitted to remove any confidential business information from EPA premises. Maxima employees will have access to confidential business information only while working on site at EPA.

Maxima is legally required under the terms of its contract to safeguard confidential business information from any unauthorized disclosure. It is especially prohibited from revealing such information to any third party in any form without written authorization from EPA. Maxima's employees will have signed nondisclosure agreements and will be briefed on appropriate security procedures which must be followed before they will be allowed access to any confidential business information.

Dated: February 7, 1982.

Don R. Clay,

Director, Office of Toxic Substances.

[FR Doc. 82–4103 Filed 2–17–82; 8:45 am]

BILLING CODE 6560-31-M

[WEN-9-FRL-2015-7]

Issuance of Final General NPDES
Permit for Oil and Gas Operations on
the Outer Continental Shelf (OCS) Off
Southern California

AGENCY: Environmental Protection Agency.

ACTION: Notice of final general NPDES permit.

SUMMARY: The Regional Administrator of Region 9 is today issuing a final general NPDES permit for certain dischargers in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category. This general NPDES permit establishes effluent limitations, standards, prohibitions and other conditions on discharges from oil and gas facilities. The facilities covered by this permit are located offshore of southern California and seaward of the territorial seas of the State of California.

EPA regulations and this permit contain a procedure which allows the owner or operator of a point source to obtain an individual permit. This final general NPDES permit is based on the administrative record which includes the support document "Preliminary Report: An Environental Assessment of Drilling Fluids and Cuttings Released Onto the Outer Continental Shelf." The fact sheet sets forth the principal facts and the significant factual, legal, and policy questions considered in issuing this permit. A copy of the permit is reprinted as required by 40 CFR 122.59.

ADDRESSES: Notifications and requests should be sent to the Regional Administrator, Region 9, U.S. Environmental Protection Agency, 215 Fremont St., San Francisco, CA 94105.

FOR FURTHER INFORMATION AND COPIES OF FINAL PERMIT CONTACT:

Eugene Bromley, Region 9, U.S. Environmental Protection Agency, 215 Fremont St., San Francisco, CA 94105. Telephone: (415) 974–8062.

SUPPLEMENTARY INFORMATION:

Request for an individual NPDES
Permit: Any operator authorized by this
permit may request to be excluded from
the coverage under this permit by
applying for an individual permit. The
operator shall submit an application
together with the reasons supporting the
request to the Regional Administrator.

A source located within the general permit area, excluded from coverage

under this permit solely because it already has an individual permit, may request that its individual permit be revoked, and that it be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply.

FACT SHEET AND SUPPLEMENTARY INFORMATION

I. Background

A. General Permits

Section 301(a) of the Clean Water Act (the Act) provides that the discharge of pollutants is unlawful except in accordance with a National Pollutant Discharge Elimination system (NPDES) permit. Although such permits to date have generally been issued to individual dischargers, EPA's regulations authorize the issuance of general permits to categories of dischargers (40 CFR 122.59). EPA may issue a single general permit to a category of point sources located within the same geographic area, whose discharges warrant similar pollution control measures. The director of an NPDES permit program (in this case the Regional Administrator) is authorized to issue a general permit if there are a number of point sources operating in a geographic area that:

- 1. Involve the same or substantially similar types of operations;
 - 2. Discharge the same types of wastes;
- 3. Require the same effluent limitations or operating conditions;
- 4. Require the same or similar monitoring requirements; and
- 5. In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

As in the case of individual permits, violation of any condition of a general permit constitutes a violation of the Act and subjects the discharger to the penalties specified in section 309 of the Act. Any owner or operator authorized by a final general permit may be excluded from coverage by applying for an individual permit. This request may be made by submitting an NPDES permit application, together with reasons supporting the request. The Regional Administrator may require any person authorized by this general permit to apply for and obtain an individual permit. In addition, any interested person may petition the Regional Administrator to take this action. However, an individual permit will not be issued for an oil or gas facility covered by a general permit unless it can be clearly demonstrated that inclusion under a general permit is inappropriate. The Regional

Administrator may consider the issuance of individual permits according to the criteria in 40 CFR 122.59(b)(2). These criteria include:

 The discharge(s) is a significant contributor of pollution;

2. The discharger is not in compliance with the terms and conditions of the

general permit;

3. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source:

4. Effluent guidelines are subsequently promulgated for the point sources covered by the general permit;

5. A Water Quality Management Plan containing requirements applicable to such point sources is approved; or

6. The requirements listed in 40 CFR 122.59(a) and identified in the previous paragraphs are not met.

B. Oil and Gas Operations on the Outer Continental Shelf Offshore of California

On January 30, 1981, EPA received a request from Chevron U.S.A. for the issuance of a general NPDES permit for Offshore California. This request was followed by numerous requests from oil and oil-related industries that the Agency proceed with the development and expedite issuance of a final general permit. On March 23, 1981, Region 9 notified Chevron of its intent to develop a general permit and notified state and local agencies, as well as interested parties by letter dated June 15, 1981. To date Region 9 of the U.S. Environmental Protection Agency has issued individual NPDES permits for 15 exploratory drilling vessels and 12 production platforms. These facilities are located seaward of the outer boundary of the territorial seas of the State of California. A review of these NPDES permits, their effluent limitations and monitoring requirements, and the criteria for establishing a general permit clearly indicated that these facilities would be more appropriately controlled by a single general permit. A general permit has been most recently issued for a similar category of point source discharges in the Gulf of Mexico. General permits eliminate, for the Agency, the time-consuming and resource intensive process of reviewing and evaluating individual permit applications, and significantly reduce the regulatory burden imposed on industry in applying for and obtaining individual permits. For the point source discharges from offshore oil and gas operations where the principal issue is the environmental fate and effects of drilling fluid discharges, the provisions for general permits allow the Agency to

address cumulative effects of multiple facilities operating in one area in permit reissuance, modification, and revocation. In addition, environmental monitoring can be defined and imposed on facilities operating in a permit area reducing the cost per facility and providing the Agency a better mechanism to address environmental degradation.

In view of the national effort to identify and develop the nation's natural resources and in view of the Department of the Interior's efforts to accelerate offshore oil and gas lease sales, it is particularly important that EPA expedite issuance of NPDES permits for these facilities where discharges will not significantly affect the marine environment. Facilities entering the areas covered by this permit will be required to notify the Agency of their intent to be covered. The use of general permits is particularly appropriate for mobile drilling units used in exploratory operations on the OCS which drill a limited number of wells at a given site to identify oil reserves. These operations require a permitting action which will allow maximum flexibility, i.e., the ability to move efficiently from one location to another within the general permit area without having to obtain a new permit.

II. Nature of Discharges From Offshore Oil and Gas Facilities

The Offshore Subcategory of the Oil and Gas Extraction Point Source Category includes facilities engaged in field exploration, drilling, production, well production, and well treatment in the oil and gas extraction industry which are located seaward of the inner boundary of the territorial seas (40 CFR Part 435).

Operations within the Offshore Subcategory can be divided into three distinct phases: exploration, development, and production. Exploratory operations involve drilling to determine the nature and extent of potential hydrocarbon reserves. These operations are usually of short duration at a given site, involve a small number of wells, and are generally conducted from mobile drilling units. These include units with traditional ship's hulls or semisubmersible craft—essentially floating platforms with submerged hulls which support the units above water.

Development operations involve the drilling of wells once a hydrocarbon reserve has been identified.

Developmental drilling averages a large number of wells (20–40) and is usually conducted from a fixed platform.

However, in some instances

development wells can be drilled from mobile drilling units.

Production operations usually begin once the drilling unit used in well development operations has been removed and the actual recovery of hydrocarbons from underground geologic formations begins. Production platforms are usually fixed for long periods of time.

The discharges which accompany the recovery of offshore oil and gas resources are discussed below. The discharges are similar for drilling vessels (exploration and development operations) and production platforms with the exception of produced water which does not result from well drilling but from actual hydrocarbon recovery. Produced water from production platforms may be discharged or reinjected into the well. Region 9 has identified a total of fourteen discharges which are discussed below.

A. Drilling Muds, and Drill Cuttings (Discharge 001)

Drilling mud is defined as any fluid sent down the hole including, gelling compounds, weighting agents, and any specialty products, from the time a well is begun until final cessation of drilling in that hole. There are two basic types of muds, water-based and oil-based muds. Water-based muds are usually mixtures of fresh water or sea water with clays. Oil-based muds (invert emulsion muds) are mistures of diesel oil and clays with water or brine emulsified in the oil.

Drilling muds are used in both exploration and production drilling to maintain hydrostatic pressure control in the well, lubricate the drilling bit, and remove drill cuttings from the well. Oilbased muds are used for special drilling requirements such as tightly consolidated subsurface formations, water sensitive clays, and shales. Specific needs of a drilling program may require other additives in the drilling muds.

Drill cuttings are mineral particles generated by drilling into subsurface geologic formations. Drill cuttings are carried to the surface of the well with the circulation of the drilling muds and separated from the fluids on the platform by solid separation equipment (screens and shakers).

B. Produced Water (Formation Water or Brine) (Discharge 002)

Produced water includes water and suspended particulate matter, brought to the surface in conjunction with the recovery of oil and gas from underground geologic formations. Produced waters are primarily generated during the production phase of oil and gas operations with the amount generated dependent upon the method of recovery and the nature of the formation. Geologic formations contain different oil-water or gas-water mixtures which are produced at different times:

- 1. In some formations, water is produced with the oil and gas in the early stages of production;
- In others, water is not produced until the formation has been significantly depleted; and
- 3. In still others, water is never produced.

C. Produced Sands (Discharge 003)

Produced sands include sands and other solids removed from the produced waters.

D. Well Completion Fluids (Discharge 004)

Well completion fluids include fluids pumped downhole to enhance oil recovery.

E. Deck Drainage (Discharge 005)

Deck drainage includes all water resulting from platform washings, deck washings, tank cleaning operations, and runoff from curbs, gutters, and drains including drip pans and work areas.

F. Sanitary Wastes (Discharge 006)

Sanitary wastes include human body waste discharges fro toilets and urinals.

G. Domestic Wastes (Discharge 007)

Domestic wastes include materials discharged from sinks, showers, laundries, and galleys.

H. Miscellaneous Discharges (Discharges 008-014)

Desalinization Unit Discharge (Discharge 008). Desalinization unit discharge means any wastewater associated with the process of creating fresh water from seawater.

Cooling Water (Discharge 009). Cooling water means once-through, noncontact cooling water.

Bilge Water (Discharge 010). Bilge water is water that accumulates in the bilge of the drilling vessel.

Ballast Water (Discharge 011). Water used by a drilling vessel to maintain proper stability.

Excess Cement (Discharge 012). Excess cement is unused cement discharged after a well cementing operation.

Blow-out Preventer Fluid (Discharge 013). Blowout preventer fluid is a mixture of water and 1–2% hydraulic fluid vented at the ocean floor during

periodic testing of the blow-out preventer system as requried by U.S. Geological Survey.

Fire System Test Water. (Discharge 014). Fire system water is sea water discharged during periodic testing of the fire control system.

III. Conditions in the General NPDES Permit

A. Geographic Areas of General Permit

The general permit published today is applicable to dischargers in the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (40 CFR Part 435) operating in Federal waters on the outer continental shelf (OCS) off the coast of Southern California.

These waters are described in final environmental impact statements for OCS lease sales 35, 48, and 53. These areas include waters west and northwest of Point Arguello, south and west of Point Conception, of the Santa Barbara Channel from Point Conception to Goleta Point, of the Santa Barbara Channel from Santa Barbara to Ventura. south of Santa Rosa and Santa Cruz Island, of the San Pedro Channel between San Pedro and Laguna, and west of San Clemente Islands in the Tanner Bank area. Under the regulatory provisions of general permits, new information on any portion of the permit area which indicates that the terms and conditions of the permit are inappropriate or do not provide adequate protection of the marine environment under Section 403 of the Act, would require the Regional Administrator to modify the permit or require a facility owner or operator to apply for and obtain an individual permit.

This general permit does not authorize discharges into the territorial seas of the State of California, nor does it authorize discharges into any body of water landward of the inner boundary of the territorial seas or any wetland adjacent to such waters (facilities in the Onshore and Coastal Subcategories as defined in 40 CFR Part 435).

The Bureau of Land Management (BLM) has identified a special lease stipulation (Stipulation 7 in Lease Sale No. 48) for certain tracts in the Tanner-Cortes Bank area. The stipulation prohibits the discharge of drill cuttings and drilling muds within an area defined by the 80 meter isobath and a 1500 meter buffer zone surrounding the 80 meter isobath for each designated parcel including OCS parcel P-0368. Lease parcel P-0368 which was included within the proposed draft general permit has been excluded from the final permit

because this parcel is within the 1500 meter buffer zone. Discharge within this lease parcel may be authorized only after issuance of a separate NPDES permit.

B. Application of the General Permit Program

The Regional Administrator of Region 9 has determined that oil and gas facilities operating within the areas described in this permit are more appropriately controlled by a general permit than by individual permits. There are several reasons for this determination. In accordance with 40 CFR 122.59, these facilities involve similar types of operations, discharge the same types of wastes, require the same effluent limitations and operating conditions, and require the same monitoring requirements. These similarities are discussed in Part II of this fact sheet. Additionally, as discussed earlier, the provisions for general permits allow the Agency to address cumulative effects of multiple facilities operating in one geographic area, and to impose an area-wide monitoring program that can more effectively assess environmental degradation.

The Agency will be permitting a relatively large number of exploratory operations with this permitting action. These facilities remain at a site for a short period of time and drill a limited number of wells at each site. The general permit provides these facilities the flexibility to move within a permitted area without applying for and obtaining a new permit. Moreover, the Agency is unable to impose the more stringent new discharger provisions to mobile drilling units operating in this permit area.* Therefore, the general permit is the best regulatory mechanism available to the Agency to impose uniform effluent limitations and conditions upon all facilities entering the permit area.

The Regional Administrator has also concluded that oil and gas facilities operating under the effluent limitations and conditions of this permit will not cause unreasonable degradation of the marine environment. This determination is based on a review of all of the material available for a determination of the issues in this general permit. The major type of waste water generated by these facilities is produced waters; these discharges are discussed in Part III D. of the fact sheet. No effluent limitations have been established for other waste

^{*}American Petroleum Inst. v. Costle Civ. No. 79-0858 (W. D. La. decided July 16, 1981).

water pollutants because they are normally reduced incidentally with the removal or reduction of another pollutant parameter, or do not represent a threat to marine water quality.

Environmental concerns appear to center around the environmental fate and effects of drilling muds in the marine environment. In the past year the Agency has undertaken several efforts to examine this issue. The Agency has prepared an extensive analysis of the available information on the environmental fate and effects of drilling muds and cuttings discharged from oil and gas facilities which is appropriate for this permitting action. The document "Preliminary Report: An **Environmental Assessment of Drilling** Fluids and Cuttings Released onto the Outer Continental Shelf' presents the scientific basis for the decision to allow the discharge of drilling muds and cuttings in the issuance of three general permits to oil and gas facilities in the Gulf of Mexico. A review of this document combined with the fact that the permit contains limitations on these discharges supports the conclusion that oil and gas facilities operating under the effluent limitations and conditions of this permit will not cause unreasonable degradation of the marine environment.

Efforts are presently underway to address the long-term fate and effects of drilling muds and cuttings. EPA's Gulf Breeze Laboratory has also completed a Summary Report of the status of the Agency's Drilling Fluids Hazard Assessment Program which is also part of the administrative record of this permit. In addition, continuing monitoring programs at the Flower Garden Banks in the Gulf of Mexico, and the monitoring program of the interagency Biological Task Force for Georges Bank, as well as on-going bioassay studies to be conducted by industry and the Gulf Breeze Laboratory will provide the Agency additional information to address the potential for long-term fate and effects, bioaccumulation, and food-chain concentration of the constituents of drilling muds and cuttings, as well as other discharges from oil and gas facilities. Under Section 403(c) of the Clean Water Act this permit contains a reopener clause (Part I.A.6 of the permit authorized by 40 CFR 125.123(d)(4)) which requires the Regional Administrator to modify or revoke this general permit if new data indicates that continued discharges may cause unreasonable degradation of the marine environment. Permit modificaion or revocation would be conducted in accordance with 40 CFR 122.15, 122.16

and 124.5 pursuant to Part II.B.5 of the general permit.

This general permit will expire on December 31, 1983. Discharges during the short term of this permit should not allow unreasonable degradation of the marine environment and the new information on the long-term fate and effects of drilling fluid discharge obtained during the term of the permit will be considered in permit reissuance.

C. Notification by Permittees

Part I.A.6 of the draft general permit requires each permittee within the general permit area to notify the Regional Administrator in writing of the commencement and termination of discharge from each facility. This written notification must include the permittee's legal name and address, lease block number, and the number and type of facilities located within the lease block or area. Failure to provide this written notification means that the facility is not authorized to discharge under this general permit. Individual permit applications are not required to be submitted by persons discharging within the general permit area.

D. Technology-Based Effluent Limitations

The Act requires all dischargers to meet effluent limitations based on the technological capacity of dischargers to control the discharge of their pollutants. Section 301(b)(1)(A) of the Act requires the application of "Best Practicable Control Technology Currently Available" (BPT). On April 13, 1979, EPA promulgated final effluent limitations guidelines establishing BPT for the Offshore Subcategory (40 CFR Part 435). These limitations have been incorporated into this final general permit.

The BPT guidelines restrict the concentration of oil and grease in produced waters to a monthly average of 48 mg/1 and daily maximum of 72 mg/1. Because of the relative inaccessibility of the production platforms, EPA has concluded that it is impracticable to specify the monthly average effluent limitation for oil and grease and to require the additional more frequent monitoring necessary to demonstrate compliance with this limitation. See 44 FR 22069, April 13, 1979, for more detailed explanation.)

BPT effluent guidelines require a "no discharge of free oil" limitation for all other discharges associated with drilling operations (deck drainage, drilling, fluids, drill cuttings, and well treatment fluids). The term "no discharge of free oil" means that a discharge shall not cause a film or sheen upon a

discoloration on the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines (40 CFR Part 435).

The BPT limitation requires that in sanitary wastes from facilities housing ten or more persons the concentration of chlorine be maintained as close to 1 mg/1 as possible. This general permit provides that any exploratory drilling vessel facility using an approved marine sanitation device that complies with Section 312 of the Act shall be in compliance with the permit.

E. Other Discharge Limitations

In addition to the BPT effluent limitations, these permits contain several other conditions.

1. Drilling Muds and Cuttings. (Discharge 001). The Agency has conducted bioassay testing of seven generic types of drilling muds and has approved these muds for discharge based on the bioassay results. The permit prohibits the discharge of drilling mud in a volume and/or concentration which, after allowance for initial dilution, would result in exceedances of the limiting permissible concentration (LPC) for a particular drilling mud. The definition of the LPC (Part III C. 17) was derived from the Ocean Discharge Regulations (40 CFR 227.27(a)). (The mud compositions and bioassay results are contained in the administrative record.)

Variation from the list of approved muds will require the facility owner or operator to conduct bioassay tests and to submit the analyses to the Regional Administrator within six months of the commencement of discharge. Specifically, the bioassay is required if the mud does not meet the definition of a "generic" mud in Part III C. 18 of the permit. Based on the results of these bioassay tests, authorization for continued discharge will be at the discretion of the Regional Administrator.

The discharge of oil-based drilling muds consitutes the discharge of free oil and, in accordance with 40 CFR Part 435, is prohibited.

A provision which provides for permit modification or revocation based on new data or information on the toxicity or long-term fate and effects of drilling muds or their constituents is included in Part I.A. 5 of the permit.

2. Produced Waters. (Discharge 002). This general permit includes effluent limitations for heavy metals in produced waters. The limits are the daily maximum concentration in the California Ocean Plan. Compliance with

these limits, is determined through the use of the following equation:

Ce=Co+Dm (Co-Cs) where:

Ce=the maximum allowable concentration, Co=the concentration from the California Ocean Plan which is to be met at the completion of initial dilution.

Cs = background seawater concentration (See Part III.C.19),

Dm = minimum probable initial dilution expressed as parts seawater per part wastewater.

Computer models such as PLUME which was developed by EPA are available for use at the Environmental Protection

Agency, Region 9.

3. Dispersants, Surfactants, and Detergents. The facility operator is also required to minimize the discharge of dispersants, surfactants, and detergents except as necessary to comply with the safety requirements of the Occupational Safety and Health Administration and the United States Geological Survey. This restriction applies to tank cleaning and other operations which do not directly involve the safety of workers. This restriction is imposed because detergents disperse and emulsify oil, thereby enhancing toxicity and making the detection of a discharge of oil more difficult. These limitations have been established pursuant to Section 403 of the Act and 40 CFR 125.123(d)(3).

4. The discharge of halogenated phenol compounds is prohibited in accordance with a U.S. Geological Survey Operations Order.

F. Ocean Discharge Criteria

Section 403 of the Act requires that an NPDES permit for a discharge into marine waters be issued in compliance with EPA's guidelines for determining the degradation of marine waters. The final 403(c) Ocean Discharge Criteria guidelines published on October 3, 1980 (45 FR 65952), set forth specific criteria for a determination of unreasonable degradation that must be addressed prior to the issuance of an NPDES permit. If sufficient information is unavailable on the proposed discharge or on its potential effects to make this determination the Director may require the applicant to submit additional information. If EPA determines that there will be no unreasonable degradation, the permit may be issued. If a determination of unreasonable degradation cannot be made, the Director must then determine whether a discharge will cause irreparable harm to the marine environment. In assessing the probability of irreparable harm, the Regional Administrator is required to make a reasonable determination that the discharger operating under a permit

with monitoring requirements and effluent limitations, will not cause permanent and significant harm to the environment. If further data gathered through monitoring indicates that the continued discharge of a pollutant will produce unreasonable degradation, the discharge must be halted or additional permit limitations established.

The regulations identify ten factors which are to be considered in making the determination of unreasonable degradation: these factors include: (1) The quantities, composition and potential for bioaccumulation or persistence of the pollutants to be discharged: (2) The potential transport of such pollutants by biological, physical or chemical processes; (3) The composition and vulnerability of the biological communities which may be exposed to such pollutants including the presence of unique species or communities of species, the presence of species identified as endangered or threatened pursuant to the Endangered Species Act or the presence of those species critical to the structure or function of the ecosystem such as those important for the food chain; (4) The importance of the receiving water area to the surrounding biological community, including the presence of spawning sites, nursery/forage areas, migratory pathways or areas necessary for other functions or critical stages in the life cycle of an organism; (5) The existence of special aquatic sites including but not limited to marine sanctuaries and refuges, parks, national and historic monuments, national seashores, wilderness areas and coral reefs; (6) The potential impacts on human health through direct and direct and indirect pathways; (7) Existing or potential recreational and commercial fishing, including finfishing and shellfishing; (8) Any applicable requirements of an approved Coastal Zone Management plan; (9) Such other factors relating to the effects of the discharge as may be appropriate, and (10) marine water quality criteria developed pursuant to Section 304(a)(1).

Factors 1, 2 and 3 relate to the composition of the pollution to be discharged, the physical, chemical and biological transport of the pollutants, and the effects of the pollutants on biological communities, critical species, and endangered species.

The document "Preliminary Report:
An Environmental Assessment of
Drilling Fluids and Cuttings Released
onto the Outer Continental Shelf"
includes an extensive analysis of the
bioassay test studies which address the
toxicity of whole drilling muds and their
constituents on marine organisms. A

summary of current bioassay studies indicates that 72 species of organisms including all major groups from invertebrates to fin fish have been tested. The results of these tests indicate that the concentrations of most drilling mud discharges after dilution and dispersion in the water column will not have any significant adverse effect on marine organisms. In addition, this permit limits the discharge of drilling muds and additives to an approved list for which the Agency has bioassay test data, and for which the concentration after initial dilution will not exceed 0.01 of the concentration found to be toxic. Variation from the approved drilling muds and additives list requires the facility owner or operator to conduct bioassay tests with appropriate sensitive marine species. Such muds must also meet the toxicity test noted above for previously tested muds. At this time the Agency is working with scientists within the Agency, in industry, and in other Federal agencies to develop a list of appropriate species to be used in further bioassay tests. The Regional Administrator may waive the bioassay requirement upon determination by the Regional Administrator that concentrations of components in the drilling mud do not pose a significant threat to marine organisms. The criteria which will be applied in making the determination will be the ranges of component concentrations in the seven drilling muds referred to in the document "Preliminary Report: An **Environmental Assessment of Drilling** Fluids and Cuttings Released onto the Outer Continental Shelf' and additional bioassay analysis or related information.

Factors 5, 7, and 8 relate to the geographic areas covered by these general permits. The general permit areas are described in Part III.A. of the Fact Sheet. The National Oceanic and Atmospheric Administration, under the authority of the Marine Protection, Research and Sanctuaries Act, has designated the Channel Islands Marine Sanctuary as a special aquatic site and has promulgated regulations applicable to the Sanctuary. This general permit is consistent with all of the requirements of these regulations even though these requirements have been suspended, as of the time of issuance of this permit. The Bureau of Land Management has identified, in Lease Sale No. 48, aquatic sites in Tanner and Coites Bank and, in a lease stipulation, has applied conditions which limit discharges associated with any exploratory or production activities on these lease parcels. Lease parcel P-0368, which was included in the proposed draft general permit, is subject to this stipulation and has, therefore, been excluded from the general permit. The Agency has not identified other special aquatic sites or potential recreational and major commercial fishing areas in the general permit area. These effluent limitations or operating conditions in this general permit should provide adequate protection of the marine sanctuary and remainder of the permit area.

Factor 4 addresses the importance of the receiving water of the permit area to non-resident species and critical habitats. This factor is intended to ensure that potential impacts on spawning sites, nursery/forage areas, migratory pathways, or other critical functions are considered. In considering this factor, the Agency has reviewed the **Environmental Impact Statements** prepared by the Bureau of Land Management. These sources and the conclusions of the technical support document indicate that discharges from oil and gas facilities operating under the terms and conditions of these general permits will not adversely affect marine species or marine communities beyond the immediate area of the discharges.

The potential impacts to human health (Factor 6) are examined in the technical summary "Preliminary Report: An Environmental Assessment of Drilling Fluids and Cuttings Released onto the Outer Continental Shelf." Discharges authorized by the general permit should not pose a threat to human health.

Factor 10 requires that the Agency identify conventional, non-conventional, and toxic pollutants in the discharge to be permitted and establish that numeric units in applicable marine water quality criteria will be met with permit limitations. The technical support document contains a thorough analysis of the components of drilling fluids, and summaries of the applicable marine water quality criteria have been prepared from the EPA publication, Quality Criteria for Water" (the "Red Book"), and from the water quality criteria for toxic pollutants published November 28, 1980 at 45 FR 79318.

The application of dispersion/dilution models from the technical summary indicates that the dilution of drilling fluid components within the mixing zone will be sufficient to reduce the concentrations of pollutants to levels below the numeric limits set in the marine water quality criteria. The report, "Analysis of Potential for Violations of Marine Water Quality Criteria Resulting from Oil and Gas Operations," has been placed in the Administrative Record for this general permit. For those drilling muds not

previously tested, the permit requires biological toxicity testing. The permit prohibits discharge of muds or any other pollutant if, after initial dilution, the concentration in the receiving water will exceed 0.01 of the concentration found to be toxic or applicable marine water quality criteria.

In the preparation of this general NPDES permit a review has been made of all of the material in the administrative record, all of the material in the file, and all material either admitted or offered in evidence in the evidentiary hearing titled: In re Diamond M Drilling Company (Diamond M General) et al.; Docket No. IX-WP-80-3, now pending before the Administrator and assigned to Administrative Law Judge Thomas B. Yost. A review of all of the material available for a determination of the issues in this general permit discloses that the state of knowledge on these subjects is extensive but not perfect. Areas of uncertainty remain. A complete factual support in the record is not possible or required. It is necessary to make policy judgments as to these matters where no factual certainties exist or are possible.

Based on a consideration of the criteria for unreasonable degradation, the available factual data, and exercising the best judgment possible in the circumstances, the Regional Administrator has determined that the discharges associated with oil and gas facilities located in the general permit area and operating in compliance with this permit will not cause unreasonable degradation of the marine environment.

G. Monitoring and Enforcement

This general permit requires dischargers to monitor monthly the concentrations of oil and grease in produced water discharges and the chlorine in sanitary waste discharges. In addition, monthly monitoring or estimates of the produced water flow rate is required, as well as annual sampling to demonstrate compliance with the numeric limits placed on heavy metals in produced water discharges. Monthly volume estimates are required for drilling muds, drill cuttings, deck drainage, produced sand, and well treatment fluids. Discharge Monitoring Reports (DMRs) must be submitted annually. A chemical inventory of all materials actually added down the well must be maintained and all records retained for three years.

H. Oil Spill Requirements

Section 311 of the Act prohibits the discharge of oil and hazardous materials in harmful quantities. In the 1978 amendments to Section 311, Congress clarified the relationship between this
Section and discharges permitted under
Section 402 of the Act. It was the intent
of Congress that routine discharges
permitted under Section 402 be excluded
from Section 311. Discharges permitted
under Section 402 are not subject to
Section 311 if they are:

- 1. In compliance with a permit under Section 402 of the Act;
- 2. Resulting from circumstances identified, reviewed and made part of the public record with respect to a permit issued or modified under Section 402 of the Act, and subject to a condition in such permit; or
- 3. Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under Section 402 of this Act, which are caused by events occurring within the scope of the relevant operating or treatment systems.

To help clarify the relationship between discharges permitted under Section 402 and Section 311 discharges, EPA has compiled the following list of discharges which it considers to be regulated under Section 311 rather than under a Section 402 permit. The list is not to be considered all-inclusive.

- 1. Discharges from a platform or structure on which oil or water treatment equipment is not mounted.
- Discharges from burst or ruptured pipelines, manifolds, pressure valves or atmospheric tanks.
 - 3. Discharges from uncontrolled wells.
- 4. Discharges from pumps or engines.
- 5. Discharges from oil gauging or measuring equipment.
- 6. Discharges from pipeline scraper, launching, and receiving equipment.
- 7. Spills of diesel fuel during transfer operations.
 - 8. Discharges from faulty drip pans.
- 9. Discharges from well head and associated valves.
- 10. Discharges from gas-liquid separators, and
 - 11. Discharges from flare lines.

I. Other Legal Requirements

The Endangered Species Act requires that each Federal Agency shall ensure that any of its actions, such as permit issuance, does not jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modifications of their habitats. The Bureau of Land Management has undertaken endangered species reviews including full consultation with the Department of Commerce, the National Marine Fisheries Service and the Department of the Interior, Fish and Wildlife Service, with respect to all oil and gas leasing in

the general permit area. EPA has concluded that the discharges authorized by this general NPDES permit will neither jeopardize the continual existence of any endangered or threatened species nor adversely affect its critical habitat. Both the National Marine Fisheries Service and the U.S. Fish and Wildlife Service have concurred with this conclusion. EPA recognizes its obligation to comply with the requirements of the Endangered Species Act, and will initiate consultation should new information reveal impacts not previously considered or should the activities affect a newly listed species.

The Coastal Zone Management Act (CZMA) and its implementing regulations (15 CFR Part 930) require that any federally licensed activity affecting the coastal zone with an approved Coastal Zone Management Program (CZMP) be determined to be consistent with the CZMP. EPA's Region 9 has determined that this general NPDES permit is consistent with the CZMP. Operations within 1000 meters seaward of the territorial sea of the State of California may have some effect on the coastal zone of California. For that reason operations under this permit may not be conducted within 1000 meters of the territorial sea of the State of California until the plan of exploration or development has been certified to the Coastal Commission of the State of California as consistent with the CZMP and has been concurred upon by that Commission.

Section 306 of the Act directs the Administrator to promulgate standards of performance for categories of sources identified in 306(b)(1)(A) which reflect the greatest degree of effluent reduction achievable through best available demonstrated control technology. The Agency has not proposed nor finally promulgated such standards, new source performance standards, for the Offshore subcategory of the Oil and Gas Extraction Point Source Category. Until new source performance standards are finally promulgated, and EPA determines that it is appropriate to modify this general permit to include an environmental review for the issuance of this general NPDES permit under the National Environmental Policy Act (NEPA).

J. Economic Impact

EPA has reviewed the effect of Executive Order 12291 on this final general permit and has determined that it is not a major rule under that order. The permit will result in substantially reduced paperwork required of regulated facilities by eliminating permit

applications and reducing reporting requirements.

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291.

K. Effective Date

The final NPDES general permit issued today is effective immediately. Ordinarily, EPA would issue this permit and allow 30-days before making the final permit effective. However, EPA may, under 5 U.S.C. Section 553(d)(1) make the permit effective immediately because it relieves a restriction on the regulated community by authorizing the discharge of pollutants in compliance with its terms. Without a permit, discharges of pollutants are prohibited under Section 301 of the Clean Water Act. Moreover, because the thirty day period between the date of issuance and the date of effectiveness is provided to afford administrative appeal, a procedure which is not available for general permits, no purpose is served by delaying the effective date.

Dated: January 22, 1982. Sonia F. Crow.

Regional Administrator, Region 9.

Note.—After review of the facts presented in the Notice of Intent printed above, I hereby certify, pursuant to the provisions of 5 U.S.C. 605(b), that the general permit will not have a significant impact on a substantial number of small entities. Moreover, it reduces a significant administrative burden on regulated sources.

Dated: February 11, 1982. John W. Hernandez, Jr., Acting Administrator.

Appendix A-Public Comments

A public hearing was held on October 16, 1981 in Santa Barbara, California to receive public comment regarding a proposed general NPDES permit covering discharges associated with the development of oil and gas resources on the Pacific Outer Continental Shelf, adjacent to southern California. Numerous comments were submitted to EPA at the public hearing and within the public comment period which closed on October 30, 1981. The following parties responded with comments:

Research and Development Associates of Denver;
Ocean Drilling and Exploration Company;
Chevron, U.S.A.;
Texaco, U.S.A.;
Lois S. Sidenberg for Get Oil Out, Inc.;
Santa Barbara Chamber of Commerce;
California Regional Water Quality Control Board, Los Angeles Region; California Department of Fish and Game;
Whitman College, Walla Walla, WA;

California Coastal Commission;

Arco Oil and Gas Co.;
American Cetacean Society;
U.S. Department of the Interior;
U.S. Department of Energy;
County of Santa Barbara;
Baker and Hostetler, Counsellors at Law;
Shell Oil Co.;
County of San Luis Obispo;
IMCO Services of Halliburton Co.;
Exxon Company U.S.A.;
Union Oil Company;
League of Women Voters, Santa Maria;
Conoco;
McMoRan, Metaire, LA;
Gulf Oil Exploration and Production Co.;

and the following individuals:

Angela Aiena, San Luis Obispo, CA; Susan N. Atlee, San Luis Obispo, CA; J. L. Mohr, Los Angeles, CA; Susan L. Anderson, Davis, CA; Maxine Staszak, Santa Barbara, CA; Joan Kerns, Santa Barbara, CA; and Pauline Spaulding, Santa Barbara, CA.

The following parties testified at the October 16 public hearing:

F. T. Weiss, John Herring, Ronald Kolpack, Robert P. Merk, Edward Gilfillan and Frank Hester, all for the Ad Hoc General NPDES Permit Group;

Mari Gottdeiner, California Coastal Commission:

William Master, Santa Barbara County; Gregory Mohr, City of Santa Barbara; John Huddleson, California State Water Resources Control Board;

Martin Byhower, American Cetacean Society; Jim Steele, California Department of Fish and Game:

Michael Wabner, Seafood Specialties; Peter Reis, Texaco, Incorporated; Eric Hanscum, Sierra Club; Ralph Hicks, Sierra Club; Fred Eissler, Scenic Shoreline; Friends of the Earth:

Ralph W. Hazard, Keel D.;

and the following individuals:

Margaret Ann Blankley; Thomas P. Smith; Dorothy Taylor Knife; John Mohr; Alice Alldredge; Douglas Stow; Kenneth S. Johnson; Rae Richardson; Beatrice M. Sweeney; William Gesner; Michael David Cox; and Mark Page.

The following parties submitted comments which were received after the public comment period which concluded on October 30, 1981:

Frank R. Bush for the Santa Lucia Chapter, Sierra Club; Victor R. Husbands, County of Ventura; Phillips Petroleum Company; Joan Leon for the League of Women Voters, San Luis Obispo; Marion Schillo for the League of Women Voters, Ventura County; Barbara Plummer for the League of Women Voters of Santa Barbara, Inc.; National Oceanic and Atmospheric Administration; California States

California State Water Resources Control Board;

Jennifer Silva, San Jose, CA; Denise Gibson, Santa Cruz, CA; Ruth W. Piper, Cupertino, CA; Gerald P. Lorentz, San Jose, CA; Jan E. Jorgensen, Santa Cruz, CA; Richard A. Davis, Santa Cruz, CA; and Edith Nelson, Santa Cruz, CA.

Comments presented during the public comment period and at the public hearing were reviewed by EPA and considered in the formulation of the final decision regarding the proposed permit. Our response to these comments is as follows:

Comment: The reopener clause of the general permit (Part I.A.5) should be modified to require that the procedures outlined in the Consolidated Permit Regulations (40 CFR 122 and 124) would be followed in any future permit modification or revocation proceedings.

Response: Part I.A.5 was obtained from 40 CFR Part 125 Subpart M (Ocean Discharge Criteria). Several commenters expressed concern that the condition specified in the draft general permit would allow the agency to modify or revoke the permit with no opportunity for comment by an affected party. However, 40 CFR Part 125 Subpart M does not affect the applicability of the procedures in the Consolidated Permit Regulations. Accordingly, any revision, suspension or revocation of the permit would be required to be conducted in accordance with 40 CFR Part 122 and 124. The permit does not change this requirement.

Comment: Many commenters objected to the drilling mud bioassay requirement (Part I.A.1.h) and the accompanying limiting permissible concentration (LPC) requirements.

Response: The EPA believes that bioassay studies have demonstrated that many drilling mud discharges will not cause unreasonable degradation of the marine environments. However, the combinations of possible drilling mud additives and formulations is too extensive to conclude that all drilling muds which would be utilized will pose no threat to the marine environment. To ensure that no unreasonable degradation of the marine environment will occur we have, in accordance with 40 CFR 125.123(a) and 40 CFR 125.123(d), included the bioassay and LPC requirements.

The preamble to the Ocean Dumping Criteria (FR 65946 Oct. 3, 1980) clearly indicates that the Regional Administrator may include the requirements of 125.123(d) to ensure no

unreasonable degradation even if the permit is issued pursuant to 125.123(a). The permit does not require bioassay testing of muds which have already been tested and found acceptable for discharge based on the bioassay results and demonstrated dispersion in the marine environment. To clarify when a bioassay is required Part III.C.18 (Definition of generic mud) was added to the permit. A mud need not be tested if it satisfies any of the requirements of Part III.C.18. Industry has indicated that the generic types of mud already tested are utilized for most drilling operations. As such, the bioassay requirement should not prove overly burdensome.

Comment: Condition I.A.1.h.(d) is flawed in that computer programs have replaced graphical techniques, such as graphical extrapolation, for determination of the LC₅₀ from bioassay data.

Response: The reference to the extrapolation has been deleted to allow the permittee to determine the LC₅₀ in accordance with the procedures of the Mid-Atlantic Joint Industry Bioassay Program or other methods approved by EPA.

Comment: Models for determining the dilution of drilling muds are not reliable.

Response: Condition III.C.16 defines the mixing zone as "the zone extending from the sea's surface to seabed and extending laterally to a distance of 100 meters in all directions from the discharge or to boundary of the zone of initial dilution as calculated by a plume model or other method approved by the Regional Administrator." In the case of drilling mud discharges, compliance with permit limitations may by more accurately determined by comparing the required dilution for a given mud discharge with observed dilution in field studies such as the Tanner Banks Mud and Cuttings Study (Ecomar, 1978), studies in the Cook Inlet (Dames & Moore, 1977), Baltimore Canyon (Ayers, 1980), and the Gulf of Mexico (Ayers, 1980). As such, Part III.C.16 has been modified to allow determination of initial dilution "by a plume model or other method approved by the Regional Administrator.

Comment: The LPC is not properly used in the general permit. The continuous discharges of drilling muds are so small that they should be considered negligible, and the bulk discharges are of short duration and will not subject organisms to the same exposure as in a 96 hour bioassay.

Response: The permittee is authorized to discharge drilling muds without specific limitation on the rate, volume or duration of discharge of pollutants contained in the drilling muds except to

the extent that the discharge not cause exceedence of a limiting permissible concentration at the edge of the mixing zone. Absent limitations on specific pollutants in the drilling muds, a limiting permissible concentration has been specified in the permit, in accordance with the authority of 40 CFR 125.123(d), and based upon bioassays, which will guard against unreasonable degradation of the marine environment. The permittee is responsible for compliance with this requirement and may be required to regulate the rate of discharge of drilling muds. For short-term bulk discharges where there is evidence submitted by the permittee that marine organisms are exposed only briefly to the drilling muds pollutants, the Regional Administrator may approve the use of an alternative application factor for calculation of the limiting permissible concentration.

Comment: Many commenters objected to the heavy metals, cyanides and phenols limits placed on the produced water discharge. They also objected to the methods used for deriving the permit limits.

Response: EPA believes that these limits should be retained to ensure compliance with requirements of Section 403(c) of the Clean Water Act. The available data show that the heavy metals concentrations in produced water vary widely but in some cases the concentrations may approach or exceed the acute toxicity level for marine organisms. The dilution achieved at the edge of the mixing zone is a function of the volume and depth of the discharge, local currents and the difference in the specific gravity between the wastewater and the receiving water. Circumstances could arise whereby heavy metals concentrations could exceed marine water quality criteria outside the zone of initial mixing. EPA is directed by Section 403(c) to ensure that this does not occur. We believe that the likelihood of degradation of the marine environment from this discharge is minimal and have, therefore modified the permit to require annual monitoring for these pollutants, rather than simiannual monitoring. The regulations do not specify that any particular modeling technique be utilized to predict ocean dispersion. EPA uses the program PLUME (developed by the EPA laboratory in Corvallis, OR) which was suggested in the preamble to the proposed Section 403(c) regulations (FR 9550 February 12, 1980). Although it was developed for municipal discharges the program is sufficiently general to be applicable to produced water discharges also. One commenter also pointed out

that PLUME includes the assumption that there is no ocean current and that greater dispersion would be expected with ocean currents. Our response to this point is that the program is basically used as a "worse case" screening tool. The permittee may provide his own proposed analysis (including effects of currents) of the dilution occurring for a given discharge if he believes that PLUME underestimates the dilution.

The commenter also objected to the derivation of the marine water quality criteria for the heavy metals in the draft permit. Specifically the commenter pointed out that the use of ambient ocean concentrations as a limit guarantees violations of the permit if the produced water adds an incremental amount of pollutant above ambient concentrations. In addition the commenter pointed that the use of the six month median concentrations from the California Ocean Plan is not appropriate since the permit requires a single semi-annual 24-hour composite sampling. In response to these concerns EPA has revised the permit for heavy metals limitations and procedures for determining compliance as follows:

| Constituent | Daily maxi- mum concen- tration (mg/1) ¹ |
|--------------------|--|
| Arsenic | 0.032 |
| Cadmium | 0.012 |
| Total chromium | |
| Copper | 0.020 |
| Lead | 0.032 |
| Mercury | 0.00056 |
| Nickel | 0.08 |
| Silver | 0.0018 |
| Zinc | 0.08 |
| Cyanide | 0.02 |
| Phenolic compounds | 0.12 |
| · | |

¹Water Quality Control Plan for Ocean Waters of California, 1978.

Compliance with these limits is determined through the use of the following equation:

Ce = Co + Dm - Dm (Co - Cs)

where:

Ce=the maximum allowable concentration, Co=the concentration in Part I.A.2.a which is , to be met at the completion of initial dilution.

Cs=background seawater concentration (See Part III.C.19)

Dm=minimum probable initial dilution expressed as parts seawater per part wastewater.

Part I.A.2 of the general permit has been modified to reflect the above changes in limits and method for determining compliance.

Comment: State certification of the permit (Section 401(a)(1) of the Clean Water Act) is not necessary and should not be requested.

Response: Section III.H of the fact sheet mentions that State certification of the permit has been formally requested of the State of California. EPA recognizes that certification of this permit is not mandated by the Clean Water Act since the dischargers are operating beyond the territorial seas of the State of California. Certification of the permit by the State will not be pursued further.

Comment: The area encompassed by the general permit is not uniform and therefore a general permit applicable to the entire region is not appropriate.

Response: EPA has discretionary authority for defining the geographic area to which the general permit applies, as indicated in the Consolidated Permit Regulations (40 CFR 122.59(a)(1)). The Agency has concluded that the geographic area of this general permit should include lease sales 35, 48, and part of the Santa Maria Basin of lease sale 53 because, based on a review of previously issued permits for discharges from comparable facilities in lease sales 35 and 48, the same permit requirements would apply for most, if not all facilities; the discharges are to moderately deep ocean waters which are at least three miles from shores of the continent and any island, and for those circumstances or conditions where this general permit would not be appropriate, a separate NPDES permit may be specifically required under 40 CFR 122.59(b)(2).

Comment: Exploratory drilling and actual production are distinct operations and a separate general permit should be issued to cover each operation.

Response: EPA, in accordance with the Consolidated Permit Regulations (40 CFR 122.59(a)(2)(ii)), may issue a general NPDES permit to regulate a category of point sources if all of the sources (a) involve the same or substantially the same type of operations, (b) discharge the same type of wastes, (c) require the same effluent limitations or operating conditions, (d) require the same monitoring, and (e) in the opinion of the Regional Administrator, are more appropriately controlled under a general permit. In promulgating effluent guidelines for discharges from production, exploration, drilling, well completion and well treatment, EPA considered such factors as age, size of the facility, manufacturing processes, products produced and treatment technology available, and promulgated a uniform set of effluent limitations for discharges from facilities which are included within the scope of this general permit. EPA has reviewed additional information which characterizes these discharges and has concluded that a general permit is applicable to

discharges from both exploratory drilling and production facilities.

Comment: A site-specific environmental review should be performed before any discharges are permitted.

Response: In the Environmental Impact Statements for lease sales 35, 48 and 53, each lease parcel received individual environmental review prior to being leased by the Bureau of Land Management (BLM). Special biological stipulations were developed for some of these parcels based on the parcelspecific review. For example, the prohibition of discharge of drilling muds and cuttings in the Tanner Banks area is a result of a BLM lease stipulation. Another stipulation requires that if the Deputy Conservation Manager (USGS) has reason to believe that biological populations or habitats exist which require special protection on a given parcel, a biological survey is required prior to any exploratory drilling or placement of a production platform. This stipulation has been invoked by BLM for many of the parcels for lease sales 48 and 53, primarily those with rocky subrates. All the parcels in the Tanner Banks area and the Santa Rosa-Cortez Ridge area require this survey. Should the results of any survey indicate the need for special protection beyond requirements of the general permit, an individual permit would be required with special conditions and effluent limitations reflecting the level of protection necessary for that specific location.

Comment: The general permit will allow unlimited oil and gas development on the Outer Continental Shelf.

Response: Industry has estimated that 69 exploratory wells and development wells for two platforms may be drilled from facilities not already covered by existing NPDES permits, during the term of the two year permit. This contrasts with approximately 3600 wells which have been drilled in the general permit area to date. Thus, the commenter's fears appear to be unfounded.

Comment: Toxicity tests should be performed on produced water prior to discharge.

Response: The general permit contains limitations, applicable to discharge of produced water, that require that marine water quality criteria not be exceeded beyond the zone of mixing. The water quality criteria which were taken from the California Ocean Plan are based upon bioassays and an application factor to further ensure that no chronic toxicity will be caused. Therefore, additional toxicity tests are not required.

Comment: Several commenters pointed out that rare and valuable animals have been discovered in the Tanner Banks area and the Santa Rosa-Cortes Ridge area. Concern was expressed regarding how the general permit provides protection for these biological resources.

Response: The Bureau of Land Management, in recognition of the valuable biological communities in the Tanner and Cortes Bank area, has placed limitations on discharges which affect specified lease parcels. Lease parcel P-0368 which was included in the draft general permit has been excluded from the final permit because this parcel is subject to and within the area defined by the lease stipulation. EPA believes that excluding from the general permit those lease parcels to which the BLM stipulation applies and the conditions of the general permit, for discharges at other lease parcels, provide sufficient protection to these biological resources.

Comment: The dispersion characteristics in the general permit area are variable and the dilution which the Agency assumes with respect to the drilling mud discharge may not actually

occur everywhere. Response: It is true that the dilution will vary depending on exactly where, in the general permit area, a discharge occurs. However, the dilution of drilling mud has been studied at a number of locations including Tanner Banks (Ecomar, 1978), Mid-Atlantic (Ayers, 1980), the Gulf of Mexico (Ayers, 1980) and the Cook Inlet (Dames and Moore, 1977). The variability of the results is modest and the studies show that the drilling muds are rapidly diluted. We would expect these results to be reasonably representative for waters of the general permit area.

Comment: Monitoring is necessary to determine compliance with the "no free oil" limit applicable to various discharges. The commenter suggested visual observations at frequent intervals.

Response: The permit has been modified to require visual observations of the receiving water, in the vicinity of discharge, for the presence of any free oil.

Comment: Effluent guidelines require a chlorine residual (1 mg/l) in the sanitary discharge for disinfection. A commenter suggested that a maximum level would be appropriate due to the toxic effects of a high chlorine concentration in the marine environment.

Response: The general permit requires that the chlorine residual be maintained as close to 1 mg/l as possible. Given the very low volume of the sanitary

discharge, we can expect substantial dilution within 100 meters and that the discharge will not represent a threat to marine biota beyond a mixing zone. In reviewing discharge monitoring reports, it is the practice of EPA to notify operators reporting residual chlorine levels of greater than 10 mg/l to reduce chlorine concentration to as close to 1 mg/l as possible. The permit, therefore, has not been modified.

Comment: The general permit should not limit discharges to the 152 lease parcels listed in the permit. As a minimum the permit should cover the present parcels and all parcels to be leased in the upcoming Lease Sale No. 68. This would eliminate the time consuming process of modifying the general permit when Lease Sale No. 68 parcels are awarded.

Response: EPA does not believe it is appropriate to authorize discharges on any lease parcel until a final EIS has been completed and reviewed. When EPA has completed a review of the final EIS for Lease Sale No. 68, we will consider proposing a permit modification to include as authorized discharge sites all parcels which are offered for sale.

Comment: The use of biocides should be prohibited.

Response: The permit prohibits the use of halogenated phenols which include many of the biocides which could be considered for use on the OCS (such as pentachlorophenol, Dowicide, and Surflo). Other biocides, such as paraformaldehyde, may be used but in quantities such that the bioassay and LPC conditions of the permit for discharge of drilling muds are met.

Comment: Compliance with marine water quality criteria should be achieved at the point of discharge rather than after initial mixing.

Response: The Ocean Discharge Criteria (40 CFR Part 125 Subpart M) provide for a zone of mixing within which the pollutants of a discharge may be diluted to levels which comply with marine water quality criteria. The regulations do not require that water quality standards be met at the discharge point. Studies have shown that the required dilution does occur within a relatively small mixing zone, as allowed by the regulations and the general permit.

Comment: The permit contains inadequate mechanisms to ensure compliance with permit limits. The commenter suggested that industry compensate EPA for additional monitoring and sampling.

Response: There is no statutory or regulatory authority upon which to base a requirement that a permittee

compensate EPA for costs attributable to monitoring and sampling by EPA.

Comment: A commenter suggested that the permit explicitly prohibit the discharges in areas not covered in the general permit.

Response: The general permit explicitly identifies the parcels to which the general permit applies. Discharge at any other location, except as authorized by another NPDES permit would be unlawful under the Clean Water Act and we, therefore, do not believe further clarification is necessary.

Comment: Several research projects are ongoing in the Santa Barbara Channel. Consultation with researchers is needed before discharges are allowed.

Response: Research study areas may be of sufficient scientific value as to require protection from over-exposure to drilling muds which would be discharged in the course of well drilling required for development of an oil field. The relatively small amount of drilling muds discharged as the result of exploration at a single location appear to represent neither a probable nor significant threat to such research sites. For those research sites where the scientific value associated with continuing research merits further protection, EPA may require a separate NPDES permit, as provided for in Part III.A of the General Permit, which establishes conditions necessary for protection of this use. EPA will, in reviewing the plans for development which each leasee must prepare for the U.S. Geological Survey, prior to their proceeding with onsite development, consider the scientific values and need for any additional protection which may be appropriate via a separate NPDES permit.

Comment: No discharges should be allowed in the Channel Islands marine Sanctuary. Also, unique biological areas such as the transition zone off Point Conception need special attention.

Response: The Channel Islands Marine Sanctuary (designated a sanctuary in September, 1980) consists of the Channel Islands from Anacapa Island to Richardson Rock and a six nautical mile buffer zone surrounding these islands. The northern boundary of the Sanctuary overlaps certain areas in several OCS lease parcels. The National Oceanic Atmospheric Administration has promulgated regulations implementing the designation of the Sanctuary. These regulations (15 CFR 935) exempt, from prohibition, discharges into the Sanctuary from hydrocarbon exploration, development and production activities where the lease parcels were sold prior to the

effective date of 15 CFR 935.6. The effective date of 15 CFR 935.6, at the time of issuance of this permit, has been suspended. EPA has concluded that the requirements of this general permit are adequate to ensure against unreasonable degradation of the marine environment in the Sanctuary and the transition zone located off Point Conception.

Comment: A revision of Section II.B. 8 (State Coastal Zone Management Plan consistency) was suggested to reflect Section 307(3)(b)(iii) of the Coastal Zone

Management Act.

Response: Section 307(3)(b)(iii) would allow EPA to issue a permit without certification of consistency if the Secretary of Commerce finds that the plan is consistent with the objectives of the Act or is otherwise necessary in the interest of national security. EPA does not believe this modification is necessary since the intent of section 307(3)(b)(iii) will be achieved under the present conditions of the permit. As such, Section II.B.8 has been left unchanged.

Comment: Many of the studies upon which EPA based its decision are defective. The commenters were particularly critical of studies performed on the environmental fate and effects of drilling muds and note that the studies have not received sufficient peer review. A commenter stated that many of the authors are not cited in Scientific Citation and that EPA should not rely so heavily on these studies.

Response: The record shows that the studies in question (such as the Tanner Banks Mud and Cuttings Study) have received the review of various parties including extensive review by EPA. While these studies may have deficiencies, EPA does not believe the alleged flaws are sufficient to negate the basic conclusions.

Comment: Inadequate notice of agency actions has been given to the

scientific community.

Response: The Consolidated Permit Regulations provide that public notice of agency actions be provided as described in 40 CFR 124.10. Persons to be informed of NPDES permit actions include applicants, affected federal and state agencies, the public at large via notice in a newspaper of wide distribution, and all other persons and organizations who have shown an interest in similar permits in the past. EPA has disseminated information on the general permit to a wide audience including all of the above groups. Notices of Agency actions have been published in the Santa Barbara News Press, Los Angeles Times, and San Diego Union. As such, we believe that there has been sufficient

notification and that the requirements of 40 CFR 124.10 have been satisfied.

Comment: A commenter suggested that Part II.B.5 (Permit Actions) be modified to specify that the procedures of 40 CFR 122 and 124 regarding permit modification and revocation would be followed.

Response: The Consolidated Permit Regulations (Ref. 40 CFR 122.15, 122.16, and 124.5) prescribe procedures to be followed for permit modification, revocation, and reissuance. These procedures will be followed if any permit action described in Part II.B.5 is initiated by the agency. EPA has cited the applicable sections of the regulations in the permit but does not believe that it is necessary to describe the procedures outlined in the above regulations in the permit itself.

Comment: Parcel P-0300 was omitted in the draft general permit.

Response: This was a typographical error. Parcel P-0300 is included in the final general permit.

Comment: Trivalent chromium in the drilling mud will ultimately be converted to the more toxic hexavalent form in the marine environment. As such, drilling mud discharges should be prohibited or restricted in the amount of chromium used.

Response: The speciation of chromium in the marine environment is not fully understood. Nevertheless, studies have been completed which indicate that trivalent chromium tends to be absorbed on particles and is not readily available for further oxidation and that oxidation to the hexavalent form proceeds very slowly. The hexavalent form of chromium is more mobile and may be expected to diffuse. EPA has therefore concluded that chromium discharged in accordance with the general permit will not cause significant acute of chronic toxicity.

Comment: The existence of mercury in the drilling mud and cuttings needs to be more fully reviewed.

Response: Mercury has been detected as a contaminant of barite which is one of the principle components of drilling mud. The exact level of mercury contamination varies with the source of the barite. Analysis for trace metals was performed for the types of drilling mud and the mercury concentration, in each mud, was found to be 1 ppm or less on a whole-mud basis, a level which will not cause unreasonable degradation of the marine environment.

The general permit allows use of drilling muds where the mercury concentration does not exceed one part per million, as defined in Part III.C.18, or other drilling muds which have been determined to be satisfactory by appropriate bioassay and demonstration of compliance with a limiting permissible concentration. EPA believes that these requirements provide adequate regulation of the discharge of mercury.

Comment: Two offshore drilling contractors suggested that the permittee referred to in the permit should be identified as the lease holder for a given parcel. Region 9 has in the past assigned responsibility for permit compliance to the owner of an exploratory drillship or offshore platform. The commenter enumerated some advantages of the change including consistency with other EPA regions.

Response: The effect of the commenter's suggestion would be to shift responsibility for permit compliance from the drilling contractor to the lease holder. In many cases the lease holder may be directly involved in the operation of an exploratory drilling vessel and in decisions which could affect compliance with the permit. However, this is not always the case. If the lease holder agrees to assume full responsibility for permit compliance and provides certification to this effect to the Regional Administrator along with the written notification of commencement of operations required by Part I.A.6 of the permit, then the permittee shall become the lease holder. Otherwise compliance with permit requirements for exploratory drilling operations shall remain the responsibility of the owner of the exploratory drillship. The permit has been modified accordingly.

Comment: A commenter suggested that Part II.B.8 (Coastal Zone Management Plan Consistency) could be interpreted to require resubmission of plans for exploration and development for facilities constructed prior to approval of the Coastal Zone Management Plan. In order to eliminate this possibility, the commenter suggested that some language be added to Part II.B.8 in the permit to clarify this requirement.

Response: EPA believes that the Coastal Zone Management Act makes it clear that facilities constructed prior to approval of the Coastal Zone Mangement Plan need not resubmit plans for consistency review. EPA does not believe it necessary to repeat the intent of the above section of the Coastal Zone Management Act in the general permit.

Comment: Many offshore facilities have a combined outfall for sanitary and domestic wastes and it is not possible to monitor each stream prior to commingling with any other waste

stream as required by Part I.A.3.b of the proposed permit.

Response: We have modified the permit, for this circumstance, to require that the wastewater effluent limitation apply to the effluent consisting of the combination of the sanitary and domestic wastewaters.

Comment: Many commenters expressed concern over a wide range of potential adverse effects associated with discharge of drilling mud into the marine environment. Concerns were expressed about possible acute and chronic toxicity, bioaccumulation, biomagnification, smothering of benthic organism and other effects. Commenters felt that more information is needed before this discharge is permitted and called for a thorough study of the issue. Other commenters stated that sufficient information is already available to conclude that drilling muds are safe for ocean disposal.

Response: Drilling muds which may be discharged in accordance with the general permit are subject to bioassay criteria which are intended to limit the discharge of toxic substances. The dispersion which can be expected for discharges to water of the Outer Continental Shelf will reduce the quantities in the water columns to concentrations which should cause neither acute nor chronic toxicity. There will probably be limited amounts of accumulated drilling muds near platforms where, as the result of well: development, substantial quantities of drilling muds will be discharged. The area affected, however, will be relatively small.

Chromium which may be discharged with drilling muds in limited quantities will be predominantly in the trivalent form. Oxidation to the hexavalent form proceeds at a very slow rate and EPA expects no significant increases or build-up of hexavalent chromium.

The general permit will be effective for a period of approximately two years. During this time, industry estimates that there will be 69 wells drilled for exploration and that there will be two new platforms. This represents a very modest number of new wells for the area to which the permit applies.

EPA has, after considering the information which has been made available, concluded that discharges authorized in accordance with the general NPDES permit will not cause an unreasonable degradation of the marine environment. Should information subsequently become available which would give cause for changing this conclusion, EPA may modify or revoke the permit.

Comment: The meaning of the phrase "no discharge of free oil" is not clear and the requirement should be in terms of the "discharge of free oil."

Response: This requirement is applicable to several wastewater streams including deck drainage, drill cutting and drilling mud and is specified in the permit in accordance with promulgated effluent guidelines (40 CFR Part 435). The term "no discharge of free oil" is defined in Part III.C.6 of the permit.

Comment: Part I.D.1. of the permit (anticipated noncompliance) was described as unclear by a commenter since no specific guidance is offered with respect to which changes must be reported.

Response: This condition applies to all permit requirements. Any change which could result in noncompliance with any permit condition must be reported.

Comment: A commenter pointed out that the barging of mud and cuttings has been accomplished in the past. The commenter asked about the costs involved and why barging should not be required now.

Response: A discussion of this subject is provided in a recent draft environmental impact report (DEIR) prepared by the California State Lands Commission (Resumption of Exploratory Drilling Operations by the Shell Oil Company, Lease PRC 3314.1, Pierpont Prospect). The review concluded that the costs of barging, trucking, and disposing of the mud would not be insignificant although they would be expected to represent a small fraction of the total project cost. The costs of land disposal of wastes generated by operations in the general permit area would be somewhat larger than for Lease PRC 3314.1 due to greater distance from land. The DEIR also stressed that suitable disposal sites are in short supply in the area.

Other commenters have pointed out that barging of the wastes, particularly from an exploratory drillship, is a hazardous operation. In view of the demonstrated low toxicity of approved drilling muds the Regional Administrator has concluded that barging of the wastes for land disposal is not justified.

Comment: A commenter argued in favor of additional dispersion studies if they might demonstrate that the .01 application factor was too stringent.

Response: The application factor is used for estimating acceptable pollutant concentrations outside a mixing zone and is based on acute toxicity data. Dispersion of the effluent is a determination which is independent of the application factor.

Comment: A commenter was unclear whether Part II.A.1 of the permit applies only to the facilities operated by the permittee or also commercial laboratories the services of which were used by the permittee.

Response: Part II.A.1 applies to the operation and maintenance of facilities operated by the permittee and defined in 40 CFR Part 435 Subpart A. The permittee is also responsible for ensuring that sampling and analyses performed by a commercial laboratory under contract are conducted in accordance with provisions of the general permit and 40 CFR Part 136.

Comment: A commenter felt that the application factor of .01 used to determine acceptable water concentration based on bioassay results is overly conservative.

Response: The application factor of .01 was obtained from 40 CFR Part 227.27(a)(2). Part III.C.17 provides for the use of other factors when justified by reasonable scientific evidence. EPA does not believe this requirement to be overly conservative.

Comment: A commenter suggested a change in the definition of "composite sample" (Part III.C.15 of the permit). The commenter felt that "equal time intervals" should be replaced by "over a period of." The commenter felt that Part I.C.1 would ensure representative sampling.

Response: We have left the definition of composite sample unchanged to ensure no uncertainty over the meaning of representative sampling.

Comment: Several commenters questioned the EPA's decision to issue a 2-year permit rather than a regular 5-year permit.

Response: EPA believes that, prior to extending or reissuing the permit, operating experience with the general permit and additional information which may subsequently become available should be reviewed. The term of the permit has, therefore, not been changed.

Comment: Drilling mud will accumulate on the pycnocline where an increased impact could be expected.

Response: While the record does contain a study where the dispersion of wastes was restricted temporarily above a pycnocline, there have been other studies which indicate that well developed gradients are infrequent and temporary on the California Outer Continental Shelf. The dispersion assumptions, upon which the general permit is based, have been confirmed in the field. As such, we believe that the dispersion of these discharges will be adequate to protect marine organisms.

Comment: A commenter questioned why an individual permit must be requested "not later than 90 days after the publication" (Part III.B of the draft permit).

Response: This was a error in the draft permit and has been deleted from the final permit. An individual permit may be requested at any time in accordance with the procedures outlined in Part III.B of the permit.

Comment: A commenter suggested that to clarify the permit on page 7 "the following outfalls" at the top of the page should be changed to Outfall number 003-007."

Response: We agree that this change would clarify the permit and have modified the permit in accordance with the suggestion.

Comment: A commenter suggested that the term "discrete sample" which is defined in Part III.C.14 of the permit be deleted because that term does not appear in any other part of the permit.

Response: A discrete sample is specified in Part I.A.3.a of the permit. The definition has, therefore, been retained.

Comment: One commenter states that he had appealed an NPDES permit previously issued to Diamond M. General which is comparable in its content, to the general permit and asked whether issuance of the general permit nullifies the appeal proceedings which are currently underway.

Response: Whether or not issuance of this final general permit will nullify the evidentiary hearing proceedings for permits issued to Diamond M. General and to other permittees involved in the same proceedings will be the decision of the Administrative Law Judge.

Comment: Bioassays should be performed on marine organisms which are indigenous to the area of discharge.

Response: Data upon which bioassay requirements of the general permit have been based were obtained from bioassays with marine organisms which are sufficiently sensitive to be indicative of the relative toxicity of these drilling muds. The low toxicities which have been observed for these drilling muds support the conclusion that discharge will not cause unreasonable degradation of the marine environment.

[Permit No. CA0110516]

General Permit—Authorization To Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 USC 1251 et seq.; the "Act"), the following discharges are authorized:

Drill Cuttings and Drilling Muds— (discharge 001)

Produced Water—(discharge 002) Produced Sand—(discharge 003) Well Completion and Treatment

Fluids—(discharge 004)
Deck Drainage—(discharge 005)
Sanitary Wastes—(discharge 006)
Domestic Wastes—(discharge 007)
Desalinization Unit Discharge—
(discharge 008)

Cooling Water—(discharge 009)
Bilge Water—(discharge 010)
Ballast Water—(discharge 011)
Excess Cement Slurry—(discharge 012)
BOP Control Fluid—(discharge 013)
Fire Control System Test Water—
(discharge 014)

from offshore oil and gas facilities (defined in 40 CFR Part 435, Subpart A) to receiving waters named the Pacific Ocean, in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III thereof.

Offshore permittees who fail to notify the Regional Administrator of their intent to be covered by this general permit are not authorized to discharge to the specified receiving waters unless an individual permit has been issued to the facility by EPA, Region 9.

The authorized discharge sites are (by OCS lease parcel number):

In waters west and northwest of Point Arguello, P-0393, P-0394, P-0395, P-0396, P-0397, P-0400, P-0401, P-0402, P-0403, P-0404, P-0405, P-0406, P-0407, P-0408, P-0409, P-0410, P-0411, P-0412, P-0413, P-0414, P-0415, P-0416, P-0418, P-0419, P-0420, P-0421, P-0422, P-0424, P-0425, P-0426, P-0427, P-0429, P-0430, P-0431, P-0432, P-0433, P-0434, P-0435, P-0436, P-0437, P-0438, P-0439, P-0440, P-0441, P-0443, P-0444, P-0445, P-0446, P-0447, P-0448, P-0449, P-0450, P-0451, P-0452, P-0453;

In waters south and west of Pt. Conception, P-0315, P-0316, P-0317, P-0318, P-0319, P-0320, P-0321, P-0322, P-0323, P-0324, P-0325, P-0327, P-0328, P-0330, P-0331, P-0332, P-0333, P-0338;

In the Santa Barbara Channel from Pt. Conception to Goleta Point, P-0180, P-0181, P-0182, P-0183, P-0184, P-0185, P-0186, P-0187, P-0188, P-0189, P-0190, P-0191, P-0192, P-0193, P-0194, P-0195, P-0196, P-0197, P-0326, P-0329, P-0334, P-0335, P-0336, P-0339, P-0340, P-0341, P-0342, P-0343, P-0344, P-0345, P-0348, P-0349, P-0350, P-0351, P-0352, P-0353, P-0354, P-0355, P-0356, P-0357, P-0358, P-0359, P-0360;

In the Santa Barbara Channel from Santa Barbara to Ventura, P-0166, P-0202, P-0203, P-0204, P-0205, P-0208, P-0209, P-0210, P-0215, P-0216, P-0217, P-0231, P-0232, P-0233, P-0234, P-0238, P-0240, P-0241, P-0337, P-0346, P-0347, P-0361;

In waters south of Santa Rosa and Santa Cruz Islands, P-0248, P-0251, P-0362, P-0363, P-0364;

In the San Pedro Channel between San Pedro and Laguna, P-0295, P-0296, P-0300, P-0301, P-0306, P-0366;

In waters west of San Clemente Island in the Tanner Bank Area, P-0367, P-0369.

This permit does not authorize discharges from "new sources" as defined in 40 CFR 122.3.

The permit shall become effective on This permit and the authorization to discharge shall expire at midnight, December 31, 1983.

Signed this 22nd day of January, 1982. Sonia F. Crow,

Regional Administrator, Region 9.

Part I-Permit No. CA0110516

A. Effluent Limitations and Monitoring Requirements

- 1. During the period beginning the date notification of commencement of operations is received by the Regional Administrator and lasting through December 31, 1983, the permittee is authorized to discharge from outfall(s) serial number 001 (drill cuttings and drilling muds).
- a. Such discharges shall be limited and monitored by the permittee as specified below:

| | Discharge limitations | | | | Monitoring requirements | |
|-------------------------------|------------------------------------|---------------|--|---------------|-------------------------|-------------|
| Effluent characteristic | Kilograms per day (pounds per day) | | Other units (specify) | | | |
| | Daily average | Daily maximum | Daily average | Daily maximum | Measurement frequency | Sample type |
| Total volume (cubic meters) 1 | | ····· | ······································ | | Once/month | Estimate. |

^{*}The total volume of drill cuttings and drilling muds discharged for the prior month at each site shall each be monitored by an estimate sample type.

- b. There shall be no discharge of free oil as a result of the discharge of drill cuttings and/or drilling muds. The permittee shall make visual observations for the presence of free oil on the surface of the receiving water in the vicinity of the discharge on each day of the discharge.
- c. There shall be no visible floating solids in the receiving waters as a result of these discharges.
- d. The discharge of oil-base drilling muds is prohibited.
- e. There shall be no discharge of toxic materials in a concentration and/or volume which after allowance for initial mixing, exceeds the limiting permissible concentration defined in Condition III.C.17. The discharge of generic drilling muds, as defined in Part III.C.18 of this permit, shall constitute compliance with this provision.
- f. Drilling Muds Inventory. The permittee shall maintain a precise chemical inventory of all constituents and their volume added downhole for each well. This inventory shall include diesel fuel and any drilling mud

- additives used to meet specific drilling requirements.
- g. Additional Monitoring Requirements: Bioassay of Spent Drilling Muds.

Within six (6) months of the initiation of drilling mud discharges, the permittee shall demonstrate compliance with condition I.A.1.e. by conducting and reporting the results of a drilling mud bioassay performed for each type of drilling mud discharged. A sample of spent drilling mud, immediately prior to its intended discharge, shall be collected for analysis. The bioassay shall be conducted in accordance with the procedures developed by the Mid-**Atlantic Joint Industry Bioassay** Program, or other methods approved by the Regional Administrator, Region 9. The following shall be submitted to the Regional Administrator:

- (a) The date the sample was collected;
- (b) The average rate of discharge and total volume of spent drilling mud discharged on the date of the sample;
- (c) The water depth into which the drilling muds were discharged;

- (d) The results of bioassays, including the survival percentages of all dilutions
- (e) A list of all components, including the weights, in pounds per barrel, used to compose the drilling muds which are discharged. If commercial names are listed, their chemical constituents shall also be provided.

The bioassay requirements shall be deemed satisfied where the permittee discharges a drilling mud for which bioassay test data, obtained through procedures defined above, has previously been submitted to the Regional Administrator without regard to whether the permittee was originally responsible for obtaining the test data.

- 2. During the period beginning the date notification of commencement of operations is received by the Regional Administrator and lasting through December 31, 1983, the permittee is authorized to discharge from outfall(s) serial number(s) 002 (produced water).
- a. Such discharges shall be limited and monitored by the permittee as specified below:

| | | Discharge | limitations | Monitoring requirements | | |
|-------------------------------|-------------------|---|---------------|-------------------------|-----------------------|-------------|
| <u> </u> | Kilograms per day | Kilograms per day (pounds per day) | | s (specify) | | |
| | Daily average | Daily maximum | Daily average | Daily maximum | Measurement frequency | Sample type |
| ow-m³/day (MGD) | | | | | Once/month | Composite. |
| il and grease | | | | 72.0 | do | 1 <u>-</u> |
| rsenic (milligrams per liter) | | | | 1.032 | Once/year | |
| admium | | *************************************** | | 1.012 | do | Do. |
| otal chromium | | | | 1.008 | do | Do. |
| ooper | | | ••••• | .020 | do | Do. |
| yanides | | | | 1.020 | do | Do. |
| ead | | | | 1.032 | do | Do. |
| ercury | | | | 1.00056 | do | Do. |
| ckel | | | | 1.080 | do | Do. |
| wer | | | | 1.0018 | do | Do. |
| nc | | | | 1.080 | do | Do. |
| renols | | | | 1.120 | do | Dď. |

¹This limit is applicable after initial dilution within a mixing zone defined in Condition III.C.16. Compliance with these limits, shall be determined through the use of the following equation: Ce=Co+Dm (Co−Cs)

- b. Samples taken in compliance with the monitoring requirements specified in Condition A.2.a., above, shall be taken at the following location: at a point in discharge 002 prior to entry into the waters of the Pacific Ocean.
- 3. During the period beginning the date notification of commencement of operations is received by the Regional Administrator and lasting through December 31, 1983, the permittee is
- authorized to discharge from outfall serial numbers 003-007.
- a. Such discharges shall be limited and monitored by the permittee as specified below:

| Serial Nos./outlalls | Effluent characteristic | Discharge limitations | Monitoring requirements | |
|----------------------|-------------------------|--------------------------|-------------------------|-------------------|
| | | | Measurement frequency | Sample type |
| 003—Produced Sand 1 | Flow Rate (MGD) | 21.0 | do | Do. Do. Do. |

There shall be no discharge of free oil as a result of this discharge. The permittee shall make visual observations for the presence of free oil on the surface of the receiving water in the vicinity of the discharge on each day of discharge.

2 Minimum of 1 mg/1 and maintained as close to this concentration as possible. This requirement is not applicable to facilities intermittently manned or to facilities permanently manned by

nine (9) or fewer persons.

Ce = the maximum allowable concentration,
Ce = the maximum allowable concentration,
Co = the concentration in Part I.A.2.a. which is to be met at the completion of initial dilution,
Cs = background seawater concentration (See Part III.C.19),
Dm = minimum probable initial dilution expressed as parts seawater per part wastewater.

b. Samples taken in compliance with monitoring requirements specified above shall be taken at a sampling point prior to commingling with any other waste stream or entering Pacific waters. In cases where sanitary and domestic wastes are mixed prior to discharge, and sampling of the sanitary waste component stream is infeasible, the discharge may be sampled after mixing. In such cases, the discharge limitation shown above for sanitary waste shall apply to the mixed waste stream.

4. a. During the period beginning the date notification of commencement of operations is received by the Regional Administrator and lasting through the permittee is authorized to discharge from outfall(s) serial number(s) 008-014

(miscellaneous discharges).

Discharge:

- 008—Desalinization Unit Discharge
- 009-Cooling water
- 010—Bilge Water
- 011—Ballast Water 012—Excess Cement Slurry
- 013-Control Fluid From Blow-Out Preventer
- 014-Fire Control System Test Water

b. There shall be no free oil in the receiving waters as a result of these discharges.

- 5. Reopener Clause. In addition to any other grounds specified herein, this permit shall be modified or revoked at any time if, on the basis of any new data, the Regional Administrator determines that continued discharges may cause unreasonable degradation of the marine environment.
- 6. Commencement and Termination of Operations—Notification Requirements. Written notification of commencement of operations including name and address of permittee, description and location of operation and of accompanying discharges shall be provided to the Regional Administrator at least fourteen (14) days prior to initiation of discharges. Permittees shall also notify the Regional Administrator upon permanent termination of discharge from these facilities. The permittee shall be the owner of the exploratory drillship or offshore platform or the leaseholder upon certification, in writing, to the Regional Administrator, prior to commencement of operation, that he shall assume full responsibility for compliance with this general permit.
- 7. Effective Date for Monitoring Requirement. The monitoring requirements shall take effect upon commencement of discharge.
- 8. Notification of Relocation by Exploratory Drilling Vessel. No less than fourteen (14) days prior to any

relocation and initiation of discharge activities at an authorized discharge site the permittee shall provide to the Regional Administrator written notification of such actions. The notification shall include the parcel number and exact coordinates of the new site and the initial date and expected duration of drilling activities at the site.

B. Other Discharge Limitation

- 1. Floating Solids or Visible Foam. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 2. Halogenated Phenol Compounds. There shall be no discharge of halogenated phenol compounds.
- 3. Surfactants, Dispersants, and Detergents. The discharge of surfactants, dispersants, and detergents shall be minimized except as necessary to comply with the safety requirements of the Occupational Health and Safety Administration and the U.S. Geological
- 4. Sanitary Wastes. Any facility using a marine sanitation device that complies with pollution control standards and regulations under Section 312 of the Act shall be deemed to be in compliance with permit limitations for sanitary waste discharges until such time as the device is replaced or is found not to comply with such standards and regulations.

C. Monitoring and Records

- 1. Representative Sampling. Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the monitored activity.
- 2. Reporting Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- 3. Penalties for Tampering. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- 4. Reporting of Monitoring Results. Monitoring results obtained during the previous 12 months shall be summarized and reported on a Discharge Monitoring Report Form, EPA No. 3320-1 (DMR). In addition, the annual average shall be reported and shall be the arithmetic average of all samples taken during the year. The highest \bar{d} aily maximum sample taken during the reporting period

shall be reported as the daily maximum concentration.

If any category of waste (outfall) is not applicable due to the type of operation (e.g., drilling, production) no reporting is required for that particular outfall. Only DMR's representative of the activities occurring need to be submitted. A notification indicating the type of operation should be provided with the DMR's.

The first report is due on the 28th day of the 13th month from the day this permit first becomes applicable to a permittee. Signed and certified copies of these and other reports required herein, shall be submitted to the Regional Administrator at the following address: Director, Enforcement Division, Region 9, U.S. Environmental Protection Agency, 215 Fremont Street, San Francisco, CA 94105.

- 5. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- 6. Averaging of Measurements. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Administrator in the permit.
- 7. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit for a period of at least three (3) years from the date of the sample, measurement, or report. This period may be extended by request of the Regional Administrator an any time.
- 8. Record Contents. Records of monitoring information shall include:
- a. The date, place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses:
- e. The analytical techniques or methods used: and
 - f. The results of such analyses.
- 9. Inspection and Entry. The permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law,

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

D. Reporting Requirements

- 1. Anticipated Noncompliance. The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- 2. Monitoring Reports. Monitoring results shall be reported at the intervals specified in Part I.C. of this permit.
- 3. Twenty-Four Hour Reporting of Noncompliance. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected. the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- The following shall be included as information which must be reported within 24 hours:
- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any upset which exceeds any effluent limitations in the permit; and
- c. Violation of a maximum daily discharge limitation for any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance, listed as such by the Regional Administrator in the permit to be reported within 24 hours.

Reports should be made to telephone' #415-974-8050. The Regional

- Administrator may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- 4. Other Noncompliance. The permittee shall report all instances of noncompliance not reported under Part I.D.3. at the time monitoring reports are submitted. The reports shall contain the information listed in Part I.D.3.
- 5. Signatory Requirements. All reports or information submitted to the Regional Administrator shall be signed and certified in accordance with 40 CFR § 122.6.
- 6. Availability of Reports. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.
- 7. Penalties for Falsification of Reports. The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

Part II-Permit No. CA0110516

A. Operation and Maintenance of Pollution Controls

- 1. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate permittee staffing and training, adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.
- 2. Duty to Halt or Reduce Activity. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative

- method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost.
- 3. Bypass of Treatment Facilities. a. Definitions.
- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which are reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section.
 - c. Notice.
- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, he shall submit prior notice, if possible, at least 10 days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part I.D.3. (24-hour notice).
 - d. Prohibition of bypass.
- (1) Bypass is prohibited, and the Regional Administrator may take enforcement action against the permittee for bypass, unless:
- (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (B) There was no feasible alternatives to the bypass, such as the use of auxilliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (C) The permittee submitted notices as required under paragraph c. of this section.
- (2) The Regional Administrator may approve an anticipated bypass, after considering its adverse effects, if he determines that it will meet the three conditions listed above in paragraph d.(1) of this section.

(4). Upset Conditions. a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination, made during administrative review of claims that noncompliance was caused by an upset, and before and action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in Part I.D.3. (24hour notice); and

(4) The permittee complied with any remedial measures required under Part II.B.4 (duty to mitigate).

d. Burden of proof. In any enforcement proceeding the permittee seeking to estalish the occurrence of an upset has the burden of proof.

5. Removed Substances. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

B. General Conditions

1. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action or for requiring a permittee to apply for and obtain an individual NPDES permit.

2. Duty to Comply with Toxic Effluent Standards. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

3. Penalties for Violation of Permit Conditions. The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 303, 306, 307, or 308 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

4. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the enironment resulting from noncompliance with this permit.

5. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause, as provided in 40 CFR 122.7(f) and in 122.15, 122.16, and 122.17 (1980). The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Civil and Criminal Liability. Except as provided in permit conditions on "Bypasses" (Part II.A.3.) and "Upsets" (part II.A.4.), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. Oil and Hazardous Substance
Liability. Nothing in this permit shall be
construed to preclude the institution of
any legal action or relieve the permittee
from any responsibilities, liabilities, or
penalities to which the permittee is or
may be subject under Section 311 of the
Act.

8. State Coastal Zone Management Plan Consistency. Discharge from drilling vessels, production platforms or other facilities engaged in exploratory drilling or production of oil and gas within 1000 meters seaward of the territorial seas of California is prohibited until the plan of exploration or development, for each affected parcel, is determined to be consistent with the Coastal Zone Management Plan by the Coastal Commission of the State of California.

9. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or

regulation under authority perserved by Section 510 of the Act.

- 10. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.
- 11. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Part III-Permit No. CA0110516

Part III Other Requirements

A. When the Regional Administrator May Require Application for an Individual NPDES Permit

The Regional Administrator may require any person authorized by this permit to apply for and obtain an individual NPDES permit when:

- a. The discharge(s) is a significant contributor of pollution;
- b. The discharger is not in compliance with the conditions of this permit;
- c. A change has occurred in the availability of the demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
- d. Effuent limitation guidelines are promulgated for point sources covered by this permit;
- e. A Water Quality Management Plan containing requirements applicable to such point source is approved; or
- f. The point source(s) covered by this permit no longer:
- (1) Involve the same or substantially similar types of operations;
- (2) Discharge the same types of wastes;
- (3) Require the same effluent limitations or operating conditions;
- (4) Require the same or similar monitoring; and
- (5) In the opinion of the Regional Administrator are more appropriately controlled under a general permit than under individual NPDES permits.

The Regional Administrator may require any permittee authorized by this permit to apply for an individual NPDES permit only if the permittee has been notified in writing that a permit application is required.

- B. When an Individual NPDES Permit May Be Requested
- a. Any permittee authorized by this permit may request to be excluded from the coverage of this general permit by applying for an individual permit. The permittee shall submit an application together with the reasons supporting the request to the Regional Administrator.
- b. When an individual NPDES permit is issued to a permittee otherwise subject to this general permit, the applicability of this permit to that owner or permittee is automatically terminated on the effective date of the individual permit.
- c. A source excluded from coverage under this general permit solely because it already has an individual permit may request that its individual permit be revoked, and that it be covered by this general permit. Upon revocation of the individual permit, this general permit shall apply to the source.

C. Definitions

- 1. "Cooling water" means once through non-contact cooling water.
- 2. "Daily maximum" means the average concentration of the parameter specified during any 24-hour period that reasonably represents the 24-hour period for the purposes of sampling.
- 3. "Deck Drainage" means all waste resulting from platform washing, deck washings, and run-off from curbs, gutters, and drains including drip pans and wash areas.
- 4. "Desalinization unit discharge" means wastewater associated with the process of creating fresh water from seawater.
- 5. "Domestic waste" includes discharges from galleys, sinks, showers, and laundries.
- 6. "No discharge of free oil" means a discharge that does not cause a film or sheen upon or a discoloration on the surface of the water or adjoining shorelines, or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.
- 7. "Drill cuttings" means particles generated by drilling into subsurface geological formations.
- 8. "Drilling muds" means any fluid sent down the well hole, including any specialty products, from the time a well is begun until final cessation of drilling in that hole.
- 9. "Produced waters" means waters and particulate matter associated with oil and gas producing formations. Sometimes the terms "formation water" or "brine water" are used to describe produced water.

- 10. "Produced sands" means sands and other solids removed from the produced waters.
- 11. "Sanitary waste" means human body waste discharged from toilets and urinals.
- 12. The term "territorial seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.
- 13. "Well completion and treatment fluids" means any fluids sent down the drill hole to improve the flow of hydrocarbons into or out of geological formations which have been drilled.
- 14. A "discrete sample" means any individual sample collected in less than fifteen minutes.
- 15. For flow rate measurements, a "composite sample" means the arithmetic mean of no fewer than eight individual measurements taken at equal intervals for twenty-four hours or for the duration of the discharge, whichever is shorter.

For oil and grease measurements, a "composite sample" means four samples taken over a twenty-four hour period analyzed separately and the four samples averaged. The daily maximum limitation for oil and grease is based on this definition of a composite sample.

For measurements other than flow rate or oil and grease, a composite sample means a combination of no fewer than eight individual samples obtained at equal time intervals for twenty-four hours or for the duration of the discharge, whichever is shorter.

16. Mixing Zone—the zone extending from the sea's surface to seabed and extending laterally to a distance of 100 meters in all directions from the discharge point or to the boundary of the zone of initial dilution as calculated by a plume model or other method approved by the Regional Administrator.

17. Limiting Permissible Concentration—that concentration which, outside the boundaries of a mixing zone as defined in Part III.C.16 above, will not exceed 0.01 of a concentration shown to be acutely toxic (96 hr. LC 50) to appropriate sensitive marine organisms in a bioassay carried out in accordance with Condition I.A.1.h. When there is reasonable scientific evidence on a specific waste material to justify the use of an application factor other than 0.01, the Regional Administrator may approve the use of such alternative factor in calculating the LPC.

18. Generic Drilling Mud. a. A drilling mud where the components and the

heavy metal concentrations in the whole mud do not exceed the below maximum values:

| Dritting mud compor | nents | Maximum heavy metal concentration | | |
|------------------------|------------------------------|-----------------------------------|--|--|
| Component | Num- ber per barrel | Species | Concen- tration, parts per million | |
| Barite | 176.0 | Aresenic | 3.0 | |
| Bentonite | 32.1 | Barium | 141,000 | |
| Chrome lignosulfonate. | 4.0 | Cadmium | 1.0 | |
| Lignite | 5.0 | Chromium (total) | 265.0 | |
| Polyonionic cellulose | 1.0 | Copper | 26.0 | |
| Salt | 10.0 | Lead | 24.0 | |
| Caustic | 1.5 | Mercury | 1.0 | |
| Cellex | 0.1 | Nickel | 8.0 | |
| Extractable organics | (1) | Vanadium | 35.0 | |
| Drill solids | 52.0 | Zinc | 181.0 | |
| Lime | 1.5 | | L | |

10.8 mg/g.

b. Alternatively, a drilling mud for which the 96 hour LC 50 concentrations, obtained via bioassay procedures defined in Part I.A.1.h of this permit, are equal to or greater than 53,000 ppm for the suspended particulate phase and 283,000 ppm for the liquid phase, or;

c. A drilling mud which, on the basis of information provided by the permittee, including the concentrations of components of the drilling muds, any bioassay data for similar drilling muds, and the rate and quantities of drilling muds discharged, as determined by the Regional Administrator, would not constitute, when discharged, a significant threat to the marine environment.

19. Background Seawater Concentration.

| Waste constituent | Cs (milli- grams per liter) |
|--------------------|---|
| Arsenic | 0.003 |
| Cadmium | |
| Total Chromium | |
| Copper | 0.002 |
| Lead | |
| Mercury | |
| Nickel | |
| Silver | |
| Zinc | 0.008 |
| Cyanide | |
| Phenolic Compounds | |

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FEDERAL MARITIME COMMISSION

[Independent Ocean Freight Forwarder License No. 2175]

Cougar International Corp.; Order of Revocation

Section 44(c), Shipping Act, 1916, provides that no independent ocean